

REMARKS/ARGUMENTS

The Office Action mailed November 23, 2004 has been carefully reviewed. The Office Action was non final. Reconsideration of this application, as amended and in view of the following remarks, is respectfully requested. The claims presented for examination are: claims 1-36.

Objection to Disclosure

In numbered paragraph 3 of the Office Action mailed November 23, 2004 the disclosure was object to because in claim 19 the phrase "multiplicity of processor" should be plural. Applicants have amended claim 19 to change the phrase to "multiplicity of processors" thereby making it plural. The same change has been made in other instances where needed.

35 USC 103 Rejection

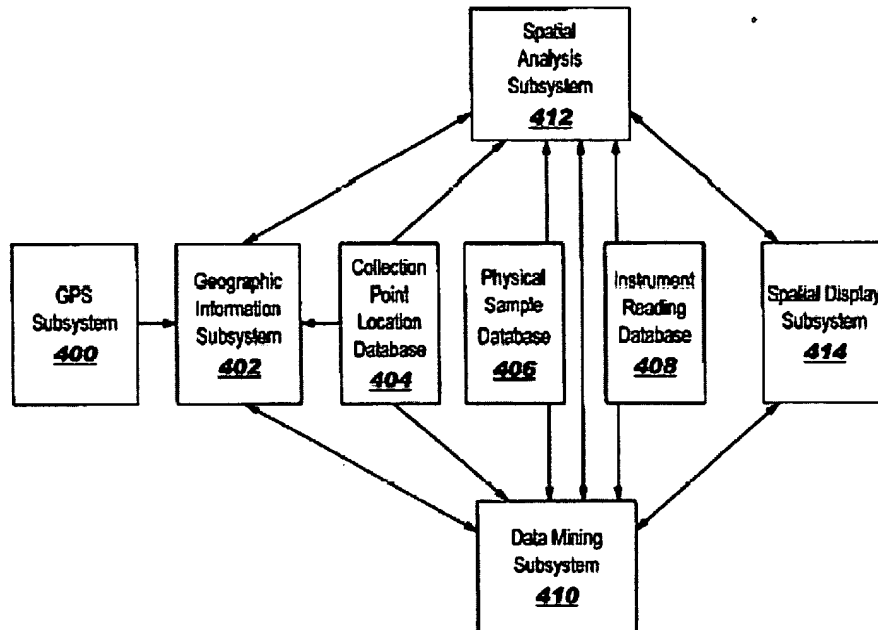
In numbered paragraph 4 of the Office Action mailed November 23, 2004 claims 1-8, 10-17, 19-26, and 28-35 were rejected under 35 USC 103(a) as allegedly being unpatentable over the primary Busche et al reference (U.S. 6,430,547) in light of the secondary Agrawal reference (U.S. 6,230,151) in further light of the tertiary Yamada et al reference (U.S. 5,319,740, 07) in further light of the quaternary Beckerle et al reference (U.S. 6,311,265 30).

Applicants' Response to 35 USC 103 Rejection

Applicants believe that amended claims 1-36 are patentable and that the primary Busche et al reference and the secondary Agrawal reference and the tertiary Yamada et al reference and the quaternary Beckerle et al reference do not support a 35 USC §103(a) rejection. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966) that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) include, "ascertaining the differences between the prior art and the claims at issue."

The Primary Busche et al reference

The primary Busche et al reference describes a system for ascertaining relationships between collected geological samples and remotely sensed geological data within a region. As shown by FIG. 4, the components that are used in a data processing system implementing the present invention include a data mining subsystem 410. A copy of FIG. 4 is provided below for reference.



The data mining subsystem 410 is described at col. 13, lines 24-43 as follows:

"Data mining subsystem 410 uses collection point location database 404, physical sample database 406, and instrument reading database 408 to discover relationships between the collected physical samples and the collected instrument data. Spatial analysis subsystem 412 uses collection point location database 404, physical sample database 406, and instrument reading database 408 to process, plot, and display spatial information.

GIS 402, data mining subsystem 408, and spatial analysis subsystem 412 transfer information as appropriate. GIS 402 may process position information as necessary for either spatial analysis subsystem 412 or data mining subsystem 408. Spatial analysis subsystem 412 receives relationship data from data mining subsystem 410 for plotting and displaying spatial relationships and may return feedback information concerning spatial relationships to data mining subsystem 408. Spatial analysis subsystem 412 and data mining subsystem 408 may provide

results to spatial display subsystem 414 that incorporates the results into various display for human interpretation and viewing." (Col. 13, lines 24-43)

In accordance with the factual inquiries set forth in Graham v. John Deere Co. for establishing a background for determining obviousness under 35 U.S.C. 103(a), Applicants will identify the differences between the primary Busche et al reference and Applicants' invention defined by amended claims 1-36. The following elements of Applicants' amended claims 1-36 are not found in the primary Busche et al reference:

(1) an object oriented module operatively connected to said processors and connected to said data files to read said data and partition said data files among said multiplicity of processors, or

(2) an object oriented module operatively connected to said processors to parallel sort said data using said multiplicity of processors, if sorting is necessary, or

(3) an object oriented module operatively connected to said processors to determine the best manner to split said data according to some criterion, or

(4) an object oriented module operatively connected to said processors to split said data, or

(5) a data mining system having a storage module, and an object oriented linking module for linking said decision tree system and said storage module, or

(6) wherein said object oriented module to determine the best manner to split said data is based on tests on single attributes of said data, or

(7) wherein said object oriented module to determine the best manner to split said data is based on a OC1 algorithm, or

(8) wherein said object oriented module to determine the best manner to split said data is based on a CART-LC algorithm, or

- (9) wherein said object oriented module to determine the manner to best split said data is based on an evolutionary algorithm, or
- (10) wherein said criterion is the Gini index, or
- (11) wherein said criterion is the information gain, or
- (12) wherein said criterion is the information ratio, or
- (13) wherein said criterion is the twoing rule, or
- (14) providing data files containing objects having relevant features, or
- (15) recognizing patterns among said objects based upon said relevant features, or
- (16) using said multiplicity of processor for reading said data from said data files using an object oriented module, or
- (17) using said multiplicity of processor for partitioning said data files among said multiplicity of processors, or
- (18) using said multiplicity of processor for parallel sorting said data using an object oriented module and said multiplicity of processors if sorting is necessary, or
- (19) determining the best manner to split said data into subsets according to some criterion using an object oriented module, or
- (20) splitting said data using an object oriented module.

The secondary Agrawal reference, the tertiary Yamada et al reference, and the quaternary Beckerle et al reference also fail to show the above identified 20 elements of Applicants' amended claims 1-36. Since the primary Busche et al reference, the secondary Agrawal reference, the tertiary Yamada et al reference, and the quaternary Beckerle et al reference fail to show the missing elements of Applicants' amended claims 1-36, there can be no combination of the references that would produce Applicants' invention defined by the amended claims.

There is no combination of the primary Busche et al reference and the secondary Agrawal reference and the tertiary Yamada et al reference and the quaternary Beckerle et al reference that would produce the combination of elements of Applicants' amended claims 1-36. Further, there is no teaching of combining the four references to meet Applicants' amended claims 1-36. Two of the requirements to establish a prima facie case of obviousness stated in MPEP §2142 are: (1) There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings, and (2) The prior art reference (or references when combined) must teach or suggest all the claim limitations. Since there is no teaching of combining the four references to meet Applicants' amended claims 1-36, the references fail to support a rejection of Applicants' amended claims 1-36 under 35 USC 103, and the rejection should be withdrawn.

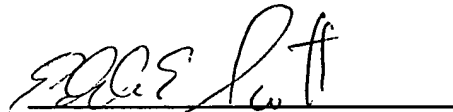
Allowable Subject Matter

In numbered paragraph 5 of the Office Action mailed November 23, 2004 claims 9, 18, 27, and 36 were "objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims."

SUMMARY

The undersigned respectfully submits that, in view of the foregoing amendments and the foregoing remarks, the rejections of the claims raised in the Office Action dated November 23, 2004 have been fully addressed and overcome, and the present application is believed to be in condition for allowance. It is respectfully requested that this application be reconsidered, that the claims be allowed, and that this case be passed to issue. If it is believed that a telephone conversation would expedite the prosecution of the present application, or clarify matters with regard to its allowance, the Examiner is invited to call the undersigned attorney at (925) 424-6897.

Respectfully submitted,



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Dated: February 16, 2005